Improving communication between physicians and patients who speak a foreign language

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SUMMARY

Background: *Communication between physicians and patients is particularly challenging when patients do not speak the local language (in Switzerland, they are known as allophones).*

Aim: *To assess the effectiveness of an intervention to improve communication skills of physicians who deal with allophone patients.*

Design of study: *'Before-and-after' intervention study, in which both patients (allophone and francophone) and physicians completed visit-specific questionnaires assessing the quality of communication.*

Setting: *Two consecutive samples of patients attending the medical outpatient clinic of a teaching hospital in French-speaking Switzerland.*

Method: *The intervention consisted of training physicians in communicating with allophone patients and working with interpreters. French-speaking patients served as the control group. The outcomes measured were: patient satisfaction with care received and with communication during consultation; and provider (primary care physician) satisfaction with care provided and communication during consultation.*

Results: *At baseline, mean scores of patients' assessments of communication were lower for allophone than for francophone patients. At follow-up, five out of six of the scores of allophone patients showed small increases (*P*<0.05) when compared with French-speaking patients: explanations given by physician; respectfulness of physician; communication; overall process of the consultation; and information about future care. In contrast, physicians' assessments did not change significantly. Finally, after the intervention, the proportion of consultations with allophone patients in which professional interpreters were present increased significantly from 46% to 67%.*

Conclusions: *The quality of communication as perceived by allophone patients can be improved with specific training aimed at primary care physicians.*

Keywords: *language; interpreters; patient–provider communication.*

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Introduction

PRIMARY health care services face increasing challenges to provide accessible care, not only to the indigenous population, but also to migrants, including allophones (this is the term used in Switzerland for people who do not speak the local language). A language barrier between patients and healthcare providers is a major obstacle to the provision of quality care to culturally diverse populations.

Migrant patients, especially those with language difficulties, tend to visit primary care services more often than local residents do.[1,2] Other studies showed that allophone patients were less likely to receive appointments for medical follow-up,[3] less likely to return for follow-up consultations,[4] and less likely to comply with prescriptions.[5,6] In a study assessing patient centredness in medical encounters, allophone patients made fewer comments on their health condition than native English-speakers, and their comments were more likely to be ignored, with a risk of poorer medical outcomes.[7] Language barriers were associated with the greater use of diagnostic investigations,[8] lower uptake of preventive services, such as breast examinations,[9] lower adherence to self-monitoring of blood glucose,[10] and lower patient satisfaction.[11-13]

Only a few studies have evaluated the impact of interpreters on patient–provider communication. Interpreter services have been shown to improve access to health care for allophone migrants.[14,15] Interpreters are essential in bridging language barriers and they play an important role in establishing patient–provider communication.[16] For instance, allophone patients' clinical service use and uptake of preventive services increased significantly after the introduction of professional interpreters in a Health Maintenance Organisation.[17]

Despite their demonstrated usefulness, interpreters are often not available.[18] In a 1999 national survey that included 266 medical and psychiatric services in Switzerland, one-third of the investigated services perceived communication with allophone patients as significantly difficult, but only 4% collected statistics on the number of allophone patients and only 11% systematically employed qualified interpreters, while most wished to have access to professional interpreter services.[19]

The present study evaluates the impact of an intervention directed at improving communication between allophone patients and physicians by training the physicians of a primary care clinic in the use of interpreters.

HOW THIS FITS IN

What do we know?

Primary care physicians working in multicultural areas have to deal with large proportions of patients who do not speak any of the local languages (in Switzerland, they are known as allophones). In this quality of care project, physicians were trained in dealing with allophone patients and working with interpreters.

What does this paper add?

Raising physicians' awareness of communication with allophone patients decreased their reliance upon non-qualified proxy interpreters. The intervention resulted in more favourable patient assessments of physician–patient communication. The intervention also resulted in greater reliance on professional interpreters.

Method

Study setting

The study was conducted at the outpatient clinic of the Community Medicine Department, which is part of the Geneva University Hospitals, Switzerland. The outpatient clinic provides ambulatory medical care on a 'first-come-first-served' basis to any adult (i.e. anyone aged 16 years and over) from 8.00 am to 11.00 pm, and is divided into a walk-in and a follow-up clinic.

More than 50% of all patients attending the clinic are foreigners, of whom about one-half are not fluent in the local language, French.[21] Since 1993, the department has been using interpreters trained to work in medical settings. It provides 60 qualified interpreters, translating 43 languages, for medical and social services dealing with foreign-language speakers. The introduction of interpreters into medical services not only required training of the interpreters, but also of the health professionals who work with them. For this, several training tools were developed: a leaflet with guidelines on how to work with interpreters, a manual on interpreting designed for both interpreters and health personnel, training modules on migrant health care and interpreting for health providers, and training modules for interpreters working in medical settings.

Study intervention

The aim of the intervention was to improve physicians' communication skills and their ability to work with interpreters. Prior quantitative surveys into language barriers to health care in Switzerland[19] helped to define the appropriate topics for the training curriculum. Different focus groups with interpreters were also organised, with junior physicians having no prior experience in working with interpreters and with health professionals communicating regularly with allophone patients via interpreters. Its components (Box 1) were taught in four workshops, which spanned over two months and integrated with continuous education of junior physicians working in primary care settings.

1. **Interactive workshop for physicians, including group work, sketches and lecture, two hours' duration:** Introduction on how to work with interpreters: planning and scheduling of interpreter-assisted consultations; structuring consultations into five steps (preparing the consultation before the patient arrives, beginning the consultation, managing communication during the consultation, finishing off the consultation; feedback after patient leaves); information on available interpreter services (languages, specialties), practicalities; and payment of the interpreters.
2. **Interactive workshop with physicians, including role plays, group work and discussion, two hours' duration:** Working with interpreters: the role and functions of healthcare interpreters (verbatim mediation, cultural mediation, advocacy mediation); group discussions, working out guidelines together with participants; code of ethics; background information on language barriers, migration and health; introduction of the manual on interpreting (*Open Words: Guide to the Bilingual Medical Interview for Health Professionals and Interpreters*), available in French and in German from the first author.
3. **Interactive workshop with physicians, including clinical vignettes, lecture, and contribution of an experienced interpreter, one hour's duration:** Managing emotional stress in interpreter-assisted interviewing; interpreter-aided medical interviews of patients with post-traumatic stress disorder; improving therapeutic partnership; coping with stress in triadic communication; the need for supervision.
4. **Interactive workshop in two physicians' sub-groups, two hours' duration:** Group discussion with physicians and interpreters on the merits and drawbacks of interpreter-mediated consultations, including confidentiality issues, initial mistrust, group dynamics in triadic communication, negotiating skills necessary in cross-cultural communication.

Box 1. Training intervention for health professionals on how to improve communication with allophone patients.

Study design

A 'before-and-after' intervention study was set up to measure the impact of the intervention. All consultations taking place during the scheduled study periods, in the outpatient services of the Department of Community Medicine for both walk-in and follow-up clinics, were included in the study. Patients and physicians rated each visit independently. Consultations with allophone and French-speaking patients were compared. Both the intervention and its evaluation were approved as a 'quality improvement project' by the Medical Director's Office of Geneva University Hospitals.

Study instruments and variables

The outline of the self-administered patient questionnaire was based on previous patient satisfaction surveys in Geneva[22,23] and has drawn on experience with satisfaction measurement tools used in a cross-cultural context.[24,25] The self-administered questionnaires for physicians contained questions on demographic patient data (age, sex, mother tongue, refugee status), presence and type of interpreters, and six items on the quality of communication: physician's responses to the patients' needs; physician's explanations; physician's respectfulness towards the patient;

communication between physician and patient in general; overall process of the consultation; and the physician's ability to provide information about future care. Physicians were asked to rate each item on a Likert scale, ranging from 0 ('poor') to 10 ('excellent').

The patient questionnaire included questions on: the physician's responses; the physician's respectfulness towards the patient; communication between physician and patient in general; the overall process of the consultation; and the physician's ability to provide information about future care. The patient questionnaire used the same Likert scales ranging from 0 to 10 and was translated into ten languages (Albanian, Arabic, English, French, German, Italian, Portuguese, Serbo-Croatian, Spanish, and Turkish) using the following procedure: three different translators produced independent versions of the questionnaire, the translations were compared and discussed, and a final version was reached by consensus of the three translators. Both questionnaires were pre-tested — the physicians' questionnaire by several junior and senior physicians and the patient questionnaire by several patients of the different language groups.

Data collection

The baseline (October 1999 to December 1999) and follow-up (May 2000 to June 2000) surveys were completed during 28 half-day periods at the outpatient clinic. The availability of interpreters was identical in both surveys, the booking of an interpreter being decided by the physicians. All patients, francophone as well as allophone, were included. A research assistant informed all patients waiting for their consultation about the study and asked them whether they would agree to answer a number of questions on communication, once their consultation was over. The questionnaires were administered to physicians and patients immediately after the consultations by the research assistant and were completed there and then. Exclusion criteria included immediate patient transfer to other services (e.g. admission to hospital) or any serious patient condition precluding participation.

Data analysis

Before-and-after and between-group comparisons were examined using contingency tables and χ^2 and Mann–Whitney tests (significance level of 0.05). Multiple linear regression was used to determine the effect of the intervention, by including the covariates TIME ('before intervention' versus 'after intervention'), LANGUAGE GROUP ('francophone' versus 'allophone') and an interaction term TIME*LANGUAGE, reflecting the specific change in allophone patients between the two surveys, adjusting for patient characteristics (age, sex, refugee status) and type of consultation. Because each physician saw a large number of patients, the lack of independence was accounted for by using the generalised estimating equation (GEE) linear models, where each physician defined a cluster. Data analyses were run using SPSS 10 and STATA 7 statistical software.

Results

Demographics of patients attending the outpatient clinic

The 1016 consultations included in the study concerned 410 (40%) patients who did not speak French (allophones) and 606 (60%) who did speak French. Allophone patients were more likely to be women, asylum seekers, and younger than the French-speakers (Table 1). Most consultations were held at the follow-up clinic. Similar frequency distributions were found in the follow-up survey, even though there were differences in the refugee status (higher proportions at follow-up) and a lower proportion of foreign-language speakers at the walk-in clinic. The most frequent mother tongues of the allophone patients were Albanian (mainly refugees from Kosovo), Serbo-Croatian (from Bosnia), Somali, Spanish (Latin America), Arabic (Iraq, Algeria), Portuguese (Angola, Guinea-Bissau) and Farsi (Afghanistan). Half of the French speakers had a mother-tongue language other than French; Spanish, Portuguese, Italian and German being the most frequent.

Satisfaction with communication

Allophone and francophone patients generally gave high ratings in evaluating the quality of the communication during the consultation (the ratings of satisfaction by patients and physicians are displayed in Table 2). Differences between the items on communication were small.

Ratings by physicians were consistently lower than those by allophone patients and showed a greater variance. The physicians' evaluation of the communication with French-speaking patients showed clearly higher mean scores than those of the allophone consultations, before and after the intervention ($P<0.001$ in all but one item; these tests are not shown in Table 3).

Impact of physicians' training

While the scores among the French speakers decreased slightly between the two surveys, those of the foreign-language speakers increased (Table 2). These changes are reflected in the effect of the intervention assessed by multivariate analysis measuring the differences in foreign-speaking patients before and after the intervention, and by subtracting the differences in French speakers.

The *P*-values of the intervention effects were $P<0.05$ for all but one of the items on the patient satisfaction (the physician's ability to fulfil the patient's needs). The results did not change substantially after adjustment for patients' age, sex, refugee status, and type of consultation. In contrast with this favourable evolution seen by patients, the physicians did not perceive a difference in the quality of communication, either between foreign-language and francophone patients, or between the two surveys.

Physicians' mean scores of the quality of communication decreased in consultations with *ad hoc* interpreters, but increased in consultations with trained interpreters, as well as in consultations without any interpreter (these subgroups being of small numbers, no statistical differences were found).

Between the two surveys, the proportion of consultations

*Table 1. Characteristics of patients attending the outpatient clinic (*n = *1016, 1999/2000).*

	Baseline survey (n = 434)[a]			Follow-up survey (n = 582)[b]		
	Allophone[c] patients	Francophone[d] patients	P-value[e]	Allophone patients	Francophone patients	P-value[f]
Sex (%)			0.01			<0.001
Female	90 (56)	117 (43)		159 (64)	149 (45)	
Male	71 (44)	156 (57)		90 (36)	184 (55)	
Age			<0.001			0.015
In years, mean (SD)	38.9 (14.7)	46.2 (18.3)		39.7 (13.8)	43.6 (16.8)	
Status (%)			<0.001			<0.001
Refugees and asylum seekers	116 (72)	29 (11)		204 (82)	32 (10)	
Others	45 (28)	244 (89)		45 (18)	301 (90)	
Type of consultation (%)			<0.001			<0.001
Follow-up clinic	137 (85)	186 (68)		228 (92)	254 (76)	
Walk-in clinic	24 (15)	87 (32)		21 (8)	79 (24)	

[a]Survey before intervention (1999). [b]Survey following intervention (2000). [c]Foreign language-speaking patients or non-French speakers. [d]Patients speaking French fluently or whose mother tongue is French. [e]Fischer's exact tests (2-sided) assessing differences between allophone and francophone patients in the baseline survey. [e]Fischer's exact tests (two-sided) assessing differences between allophone and francophone patients in the follow-up survey.

where qualified interpreters were present increased: while the proportion of interpreter use in allophone consultations was 46% at baseline, it increased significantly in the follow-up survey to 67% (P<0.001). Concurrently, the number of allophone consultations with relatives acting as proxy interpreters or no interpreting aid at all, decreased from 54% to 33% (P<0.001).

Discussion

Summary of the main findings

This study revealed that the communication between primary care physicians and allophone patients, at least as perceived by the patients themselves, might be improved by specific training sessions delivered to the physicians about how to deal with allophone patients. After the intervention, which was aimed at improving the physicians' ability to work with interpreters, allophone patients gave somewhat higher scores for the respectfulness of the physician, communication during the consultation, and the overall process of the consultation in general. This improvement was most likely owing to the health professionals' greater ease in working in partnership with interpreters, in the handling of the three-way relationship, and in the migrant patient-centred approach. Surprisingly, the physicians themselves became more critical towards communication issues, especially when dealing with foreign-language speakers. The training modules may have raised their awareness of communication and language barriers. This may explain why on the physicians' side, no significant improvement in the perceived quality of communication was observed.

The study in relation to existing literature

The most important visible change in the physicians' behaviour was the increased demand for assistance by professional interpreters. Whereas, during the baseline survey, interpreters were booked for fewer than half of the consultations with allophone patients, this proportion rose to two-thirds of the consultations following the training modules. This occurred without specific encouragement in the training sessions to use interpreters more often (as has been done in another project[26]).

We can thus conclude that, following the intervention, the use of interpreters in consultations with migrants unable to communicate in the local language has become more systematic. A similar tendency was also observed in other programmes aimed at improving health care provision for migrant patients.[26,27] The decrease in consultations with proxy interpreters, where confidentiality and consent agreement cannot be assured in a proper way,[14,28] was another encouraging trend, also reported by others.[29,30]

Strengths and limitations of the study

Satisfaction ratings were high throughout the two evaluations, and there was a relative homogeneity in the ratings of the different questions. This might be partly explained by the 'halo' effect, whereby a general positive perception influences answers to specific items. The generally high scores on the Likert scales (by both allophone and francophone patients) confirm observations made in patient satisfaction studies that quantitative surveys 'on the spot' result in higher ratings than qualitative research among patients some time after the intervention.[31] The resulting ceiling effect may have limited our ability to detect improvement in satisfaction scores. Nevertheless, the increases in satisfaction scores after the intervention amounted to about one-third of a standard deviation, which can be interpreted as a moderate effect.[32] The observed effects may have been further weakened by the limited reliability of single-item assessments.

Finally, the patient questionnaire that was developed in French, translated into ten languages, and pre-tested by patients of different languages, seemed to be culturally and linguistically acceptable, but no formal assessment of its psychometric performances was conducted.

Implications for future research and clinical practice

Further in-depth research is needed to explore satisfaction and perception of culturally and linguistically diverse patients, so that interventions can be designed to meet their needs. Further quantitative research should also be pursued, to assess the impact of better interpreter use and improved allophone communication on clinical outcomes,

Table 2. Changes in the quality of communication after physicians' training on how to work with interpreters (n=1016, 1999/2000)

	Allophone patients			Francophone patients			Effect of intervention[b]		Adjusted effect of intervention [d]	
	Baseline, mean (SD)[f]	Follow-up, mean (SD)	*P*-value[a]	Baseline, mean (SD)	Follow-up, mean (SD)	*P*-value	*n* = 1016	*P*-value[c]	*n* = 1016	*P*-value[e]
According to the patient										
Doctor's response to the patient's needs	8.7 (1.1)	8.9 (1.0)	0.01	8.6 (1.4)	8.6 (1.3)	0.73	0.14	0.37	0.10	0.54
Doctor's explanations	8.7 (1.1)	8.9 (0.9)	0.01	8.7 (1.1)	8.7 (1.2)	0.30	0.30	0.03	0.28	0.05
Doctor's respectfulness towards the patient	8.8 (1.0)	9.0 (0.7)	0.04	9.0 (0.5)	8.8 (1.1)	0.003	0.41	<0.001	0.40	0.001
Communication between patient and doctor	8.5 (1.3)	8.8 (1.0)	0.03	8.6 (1.2)	8.5 (1.4)	0.27	0.37	0.03	0.32	0.05
Consultation process in general	8.5 (1.4)	8.8 (1.0)	0.02	8.5 (1.4)	8.5 (1.4)	0.40	0.37	0.03	0.35	0.04
Doctor's explanations regarding follow-up afterwards	8.6 (1.3)	8.8 (1.0)	0.02	8.6 (1.2)	8.5 (1.5)	0.28	0.34	0.04	0.33	0.05
According to the doctor										
Ability to respond to the patient's needs	7.1 (1.7)	7.1 (2.1)	0.84	7.8 (1.9)	8.1 (1.8)	0.03	-0.27	0.15	-0.21	0.25
Patient's explanations	7.0 (2.1)	7.3 (2.2)	0.14	8.2 (2.1)	8.2 (1.9)	0.95	0.15	0.50	0.22	0.32
Patient's respectfulness towards the doctor	8.8 (1.2)	8.5 (1.7)	0.47	8.9 (1.3)	8.8 (1.3)	0.27	-0.21	0.08	-0.19	0.12
Communication between patient and doctor	7.4 (1.9)	7.4 (2.2)	0.30	8.2 (1.8)	8.4 (1.6)	0.27	-0.03	0.88	0.03	0.90
Consultation process in general	7.6 (1.7)	7.6 (2.0)	0.59	8.1 (1.8)	8.4 (1.5)	0.11	-0.23	0.20	-0.19	0.30
Patient's understanding of the explanations regarding the follow-up	7.4 (1.7)	7.5 (2.1)	0.20	8.2 (1.8)	8.3 (1.6)	0.55	0.05	0.82	0.13	0.52

[a]Mann–Whitney test of differences between baseline and follow-up survey. [b]Changes in allophone patients before and after intervention, subtracting differences among French-speaking patients, adjusted for clustering on physicians. [c]Significance level of the coefficients in the regression model. [d]Changes in allophone patients before and after intervention, subtracting differences in French-speaking patients, adjusted for patient's age, sex, refugee status, type of consultation and clustering on physicians, estimated by GEE linear model. [e]Significance level of the coefficients in the regression model adjusted for patient's age, sex, refugee status, type of consultation and clustering on physicians. [f]Mean scores on the 10-point Likert scales of communication items and standard deviations.

such as better adherence to treatments or improvement of symptoms.

Our study demonstrates that training health professionals on how to deal with allophone patients, including skills in using interpreters, can result in better communication with allophone patients. Considering the magnitude of the challenges faced by health professionals who have to communicate with allophone patients, and based on our observations, we recommend that the mother tongue and language proficiencies of the patient be systematically recorded in the patient files, together with the booking of an interpreter, and that training modules on working with interpreters be an integral part of the postgraduate and continuous education of health professionals who work in multicultural primary care settings.

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